

The Smell of Garbage

Jan 1, 2005 [Chaz Miller](#)

GARBAGE SMELLS. WELL, NOT ALWAYS, but anyone with a nose knows that garbage can stink. A bag of meat or diapers left in a garbage can on a hot, humid summer day can send a powerful message about the mischief-making powers of bacteria and microbes.

A bag of garbage smells for a very simple reason. It contains decaying, putrescible materials such as meat or vegetables or diapers. As meat decays, it attracts bacteria that feast on the amino acids in the meat's proteins. Vegetables also can rot and slowly liquefy as microbes attack the vegetables' cell structure and the fermenting liquids warm up the garbage bag. As more gasses and liquids are produced, the bag may rupture. It may sound gross, but it is just garbage at work.

The odors from the decomposition process are a variety of goodies with nasty sounding names. After all, who wants to invite “cadaverine” or “putrescine” over for dinner? Although these smells are obnoxious, they don't pose a health threat. However, the rats and flies attracted by rotting garbage do. These “vectors” spread diseases that can be serious to humans if they get into our food supplies.

The good news is that our modern garbage collection and disposal systems have guaranteed that trash is no longer a public health problem in America. But we are still left with the smell.

Our individual reactions to odors are subjective. Some of us have a better sense of smell than others. We differ in the scents that offend or please us. I don't like most perfumes, and I find the odor of some chewing gums to be nauseating, but I love the scent of hyacinths in the springtime.

A good sense of smell is important for survival of the human race. We need to be able to smell sour milk and the smoke from a fire. The ability to smell is so incredibly important that Richard Axel and Linda Buck won the 2004 Nobel Prize in Physiology or Medicine for discovering how the sense of smell works and how a person can differentiate between and remember 10,000 different smells.

In one of life's little ironies, increased recycling may have aggravated trash's smell factor by taking non-putrescibles out of the garbage bag and concentrating the amount of material that can decay. But only a rabid anti-recycler would use that as an argument against recycling.

So what can we do? We can deny that trash smells, or we can take proactive steps to manage odors at transfer stations, composting facilities and landfills. Failure to control odors can intensify public opposition to these facilities and make it difficult to protect public health.

“Managing Solid Waste Facilities to Prevent Odor” is a new NSWMA research paper that is available on our Web site, www.nswma.org.

Although no single magic bullet — no one-size-fits-all odor management solution — exists, the paper offers numerous odor prevention and control measures with proven success records. Clearly, the most important step to take in managing odors is to take odor complaints seriously, and then act to ensure that odors are controlled.

As for me, whenever I have a really smelly garbage bag, I put one of those perfume samplers that come in magazines into the trash can. Then I let the odors fight it out.

Opinions in this column do not necessarily reflect the opinions of the National Solid Wastes Management Association or the Environmental Industry Associations. E-mail the author at: cmiller@envasns.org.

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